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UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA

Alexandria Division

2015 NOV 23 P 4:50

COBALT LIGHT SYSTEMS, INC.,

CLERK US DISTRICT COURT ALEXANDRIA, VIRGINIA

AND

THE SCIENCE AND TECHNOLOGY FACILITIES COUNCIL

Plaintiffs,

v.

MKS TECHNOLOGY LLC D/B/A SNOWY RANGE INSTRUMENTS,

Defendant.

Civil Action No.: 1:15 CV 1566
AJT (IPD)

COMPLAINT

Plaintiffs Cobalt Light Systems, Inc. ("Cobalt") and The Science And Technology Facilities Council ("STFC") (collectively "Plaintiffs"), as their complaint for patent infringement against defendant MKS Technology LLC d/b/a Snowy Range Instruments ("SnRI" or "Defendant"), allege as follows:

THE PARTIES

1. Plaintiff Cobalt Light Systems, Inc. is a corporation organized and existing under the laws of the State of Delaware, having its principal place of business at 11951 Freedom Drive, Reston, VA 20190. Cobalt is the exclusive field of use licensee of several patents directed to "Raman spectrographic technology."

- 2. Plaintiff The Science and Technology Facilities Council is an executive Non-Departmental Public Body, established as a company under Royal Charter (company number RC000817) under the Science and Technology Act 1965 and The Science and Technology Facilities Council Order 2007, existing under the laws of United Kingdom and having its principal place of business at Rutherford Appleton Laboratory, Harwell Science and Innovation Campus, Didcot, Oxfordshire, OX11 0QS, United Kingdom. STFC owns several patents directed to "Raman spectrographic technology."
- 3. Upon information and belief, MKS Technology LLC d/b/a Snowy Range Instruments, Inc. is a corporation organized and existing pursuant to the laws of the State of Wyoming, with its principal place of business at 407 S. 2nd Street, Laramie, WY 82070.

JURISDICTION AND VENUE

- 4. This Court has subject matter jurisdiction over Plaintiffs' claims for patent infringement pursuant to 35 U.S.C. § 271, et seq. and 28 U.S.C. §§ 1331 and 1338(a).
- 5. This Court has personal jurisdiction over Defendant SnRI pursuant to the Code of Virginia § 8.01-328.1, by, *inter alia*, its regularly doing and soliciting business and deriving substantial revenue from goods used or consumed or services rendered by reason of its transaction of business in the Commonwealth of Virginia and in this District and its importation or intention to import infringing products for use within the Commonwealth of Virginia and in this District.
- 6. Upon information and belief, SnRI regularly conducts and solicits significant business from the United States Department of Defense, which is located in this District.

- 7. Upon information and belief, over the last four years, SnRI has obtained over \$600,000 in contracts from the United States Department of Defense to develop and manufacture imaging and spectrographic products.
- 8. Upon information and belief, the CTTSO, which is part of the United States Department of Defense and located in this District, has worked with SnRI to develop a low cost, pocket-sized Raman device that can identify a range of chemical and energetic materials and which is being specifically designed and developed to ensure results validity. CTTSO intends to purchase the device for wide use in specialized operations and site-specific exploration, as well as supporting departments with limited budgets. An annual review document circulated by CTTSO detailing this collaboration is attached is attached hereto as Exhibit A.
- 9. Upon information and belief, SnRI has entered into a contract to manufacture infringing products and is manufacturing infringing products.
- 10. Upon information and belief, these infringing products will be tested by the Technical Support Working Group ("TSWG"), which is a part of CTTSO.
- 11. The Assistant Secretary of Defense established CTTSO in 1999 to consolidate United States Department of Defense research and development programs. The research and development effort that supports the interagency TSWG, which was the first program to transition to CTTSO, is divided into 10 subgroups, each chaired by senior representatives from federal agencies. CTTSO and TSWG, as well as multiple federal agencies participating therewith, are located in this district.
 - 12. Venue in this District is proper under 28 U.S.C. §§ 1391(c) and 1400.

FACTS

- 13. Plaintiff STFC has invested significant funds, time and resources into developing imaging devices and techniques using Raman scattering principles.
- 14. The technology developed by STFC uses Raman spectrographic technology to provide material identification of products without requiring the need to tamper with or otherwise remove such materials from its packaging. In general, Raman spectrographic technology developed by STFC provides incident radiation to an entry region of an object (e.g., a plastic container) that contains an unknown substance. As the incident radiation enters the object and passes through the unknown substance, scattered light is collected from a spatially offset location and Raman features that are spectrally related to the incident radiation are detected therefrom. The detected Raman features can be used to determine whether or not a predefined substance is present in the unknown substance contained within the object without the need to open or tamper with the object.
- 15. STFC's Raman spectrographic technology allows an individual or automated process to scan a target object to detect the substances that are contained within a variety of container types, shapes and sizes, such as multi-layer paper and plastic sacks, opaque plastic drums, thick amber glass bottles, etc. without having to open or otherwise destroy the container.
- 16. STFC's Raman spectrographic technology has groundbreaking applicability and represents a significant advance in the area of security screening to detect the presence of banned or hazardous substances (e.g., drugs, chemicals or explosives), as well as confirm that scanned items have not been adulterated by the addition of extraneous substances (e.g., food and pharmaceutical fraud).

- 17. On January 26, 2010, the United States Patent Office duly issued U.S. Patent No. 7,652,763 (the "763 Patent"), entitled "Apparatus for Depth-Selective Raman Spectroscopy." A copy of the '763 Patent is attached hereto as Exhibit B.
- 18. On March 22, 2011, the United States Patent Office duly issued U.S. Patent No. 7,911,604 (the "604 Patent"), entitled "Security Screening Using Raman Analysis." A copy of the '604 Patent is attached hereto as Exhibit C.
- 19. On August 21, 2012, the United States Patent Office duly issued U.S. Patent No. 8,248,600 (the "600 Patent"), entitled "Raman Detection of Container Contents." A copy of the '600 Patent is attached hereto as Exhibit D.
- 20. Plaintiff STFC is the owner by assignment of the '763 Patent, the '604 Patent and the '600 Patent.
- 21. Plaintiff STFC has licensed the '763 Patent, the '604 Patent and the '600 Patent for development of the technology covered by the patents into commercial products.
- 22. Plaintiff Cobalt is the exclusive licensee in the United States of the '763 Patent, the '604 Patent, and the '600 Patent.
- 23. Plaintiff Cobalt has the exclusive right to sell products covered by the '763, the '604 Patent and the '600 Patent in the United States.
- 24. Products sold by Cobalt in the United States covered by the '763 Patent, the '604 Patent, and/or the '600 Patent include RapID, which is a next generation portable raw materials identification verification system that provides for identification through non-transparent and colored containers, and the Insight Range of liquid explosive detection systems.

SnRI's Infringing Activities

- 25. Upon information and belief, SnRI has entered into a contract with Defense Science and Technology Laboratory ("DSTL"), which is a department of the government of the United Kingdom, to develop and manufacture a Raman spectrographic imaging device identified as "Profiler".
- 26. The Profiler device was exhibited at the 8th International Conference on Advanced Vibrational Spectroscopy ("ICAVS") in Vienna, Austria, which was held from July 12 through 15, 2015. The brochure illustrating the Profiler device is contained in Exhibit E.
- 27. Upon information and belief, the Profiler device is being manufactured in Wyoming and, as part of its contract with DSTL, will be tested by TSWG as part of its evaluation for potential use by agencies within the United States Department of Defense.
- 28. Upon information and belief, the Profiler device uses Raman scattering techniques, including, for example, providing radiation sources and detectors that are offset from each other, comparing the Raman characteristics of the collected radiation to perform depth-selective analysis, and comparing the analyzed data against information contained in a library to determine the presence of a particular substance.
- 29. Upon information and belief, the Profiler device impermissibly appropriates technology developed by STFC and infringes at least the following claims of the '763 Patent, the '604 Patent, and the '600 Patent, as detailed in the chart below:

U.S. Patent No. 7,652,763	U.S. Patent No. 7,911,604	U.S. Patent No. 8,248,600
Independent claim 1	Independent claim 1	Independent claim 30
Dependent claim 2	Dependent claim 4	Dependent claim 31
Dependent claim 5	Dependent claim 5	Dependent claim 32
Dependent claim 11	Dependent claim 6	Dependent claim 33
Dependent claim 48	Dependent claim 8	
Dependent claim 49	Dependent claim 15	Independent claim 38
		Dependent claim 39
Independent claim 13	Independent claim 16	Dependent claim 40
Dependent claim 15	Dependent claim 20	Dependent claim 41
Dependent claim 20	Dependent claim 21	Dependent claim 42
Dependent claim 25	Dependent claim 23	_
Dependent claim 26	Dependent claim 30	
Dependent claim 30	_	
Independent claim 31		
Dependent claim 32		
Dependent claim 33		
Dependent claim 50		
Dependent claim 51		

COUNT I – PATENT INFRINGEMENT

U.S. Patent No. 7,652,763

- 30. Plaintiffs repeats the allegations contained in Paragraphs 1-29 of this Complaint as if fully set forth herein.
 - 31. Count I is for patent infringement under 35 U.S.C. § 271, et. seq.
- 32. Upon information and belief, SnRI is manufacturing and using a Raman spectrographic analysis product identified as a "Profiler" that infringes the '763 Patent.
- 33. Upon information and belief, SnRI has in the past infringed and continues to infringe the '763 Patent, directly and/or by contributory infringement and/or by inducement of infringement, by making, using, selling and/or offering to sell, in this judicial district and elsewhere in the United States, products, including the Profiler product, that are covered by at

least independent claim 1 of the '763 Patent, as detailed herein. Thus, SnRI is liable for infringement of the '763 Patent pursuant to 35 U.S.C. § 271.

- 34. SnRI's acts of infringement have caused damage to Plaintiffs, and Plaintiffs are entitled to recover from SnRI the damages sustained by Plaintiffs as a result of the SnRI's wrongful acts in an amount subject to proof at trial.
- 35. As a consequence of the infringement complained of herein, Plaintiffs have been irreparably damaged, the full extent of which Plaintiffs are currently unable to ascertain, and will continue to be irreparably damaged by such acts in the future unless SnRI is enjoined by this Court from committing further acts of infringement.
- 36. Upon information and belief, SnRI has been on notice of the '763 Patent through, among other things, its research conducted prior to any dealings with Plaintiffs.
- 37. Upon information and belief, SnRI was aware of the '763 Patent prior to its acts of infringement through, among other things, its acknowledgement of detailed knowledge of the '763 Patent during a September 2, 2015 meeting between SnRI and Cobalt's parent corporation, Cobalt Light Systems Ltd. (UK). Accordingly, SnRI's actions of infringement were made and continue to be made with knowledge of the '763 Patent despite an objectively high likelihood that its actions constituted infringement of a valid patent. Such acts constitute willful infringement, make this case exceptional pursuant to 35 U.S.C. §§ 284 and 285 and entitle Plaintiffs to enhanced damages and reasonable attorneys' fees against SnRI.

COUNT II – PATENT INFRINGEMENT

U.S. Patent No. 7,911,604

38. Plaintiffs repeats the allegations contained in Paragraphs 1-37 of this Complaint as if fully set forth herein.

- 39. Count II is for patent infringement under 35 U.S.C. § 271, et. seq.
- 40. Upon information and belief, SnRI is manufacturing and using a Raman spectrographic analysis product identified as a "Profiler" that infringes the '604 Patent.
- 41. Upon information and belief, SnRI has in the past infringed and continues to infringe the '604 Patent, directly and/or by contributory infringement and/or by inducement of infringement, by making, using, selling and/or offering to sell, in this judicial district and elsewhere in the United States, products, including the Profiler product, that are covered by at least independent claim 1 of the '604 Patent, as detailed herein. Thus, SnRI is liable for infringement of the '604 Patent pursuant to 35 U.S.C. § 271.
- 42. SnRI's acts of infringement have caused damage to Plaintiffs, and Plaintiffs are entitled to recover from SnRI the damages sustained by Plaintiffs as a result of the SnRI's wrongful acts in an amount subject to proof at trial.
- 43. As a consequence of the infringement complained of herein, Plaintiffs have been irreparably damaged, the full extent of which Plaintiffs are currently unable to ascertain, and will continue to be irreparably damaged by such acts in the future unless SnRI is enjoined by this Court from committing further acts of infringement.
- 44. Upon information and belief, SnRI has been on notice of the '604 Patent through, among other things, its research conducted prior to any dealings with Plaintiffs.
- 45. Upon information and belief, SnRI was aware of the '604 Patent prior to its acts of infringement through, among other things, its acknowledgement of detailed knowledge of the '604 Patent during a September 2, 2015 meeting between SnRI and Cobalt's parent corporation, Cobalt Light Systems Ltd. (UK). Accordingly, SnRI's actions of infringement were made and continue to be made with knowledge of the '604 Patent despite an objectively high likelihood

that its actions constituted infringement of a valid patent. Such acts constitute willful infringement, make this case exceptional pursuant to 35 U.S.C. §§ 284 and 285 and entitle Plaintiffs to enhanced damages and reasonable attorneys' fees against SnRI.

COUNT III - PATENT INFRINGEMENT

U.S. Patent No. 8,248,600

- 46. Plaintiffs repeats the allegations contained in Paragraphs 1-45 of this Complaint as if fully set forth herein.
 - 47. Count III is for patent infringement under 35 U.S.C. § 271, et. seq.
- 48. Upon information and belief, SnRI is manufacturing and using a Raman spectrographic analysis product identified as a "Profiler" that infringes the '600 Patent.
- 49. Upon information and belief, SnRI has in the past infringed and continues to infringe the '600 Patent, directly and/or by contributory infringement and/or by inducement of infringement, by making, using, selling and/or offering to sell, in this judicial district and elsewhere in the United States, products, including the Profiler product, that are covered by at least independent claim 1 of the '600 Patent, as detailed herein. Thus, SnRI is liable for infringement of the '600 Patent pursuant to 35 U.S.C. § 271.
- 50. SnRI's acts of infringement have caused damage to Plaintiffs, and Plaintiffs are entitled to recover from SnRI the damages sustained by Plaintiffs as a result of the SnRI's wrongful acts in an amount subject to proof at trial.
- 51. As a consequence of the infringement complained of herein, Plaintiffs have been irreparably damaged, the full extent of which Plaintiffs are currently unable to ascertain, and will

continue to be irreparably damaged by such acts in the future unless SnRI is enjoined by this Court from committing further acts of infringement.

- 52. Upon information and belief, SnRI has been on notice of the '600 Patent through, among other things, its research conducted prior to any dealings with Plaintiffs.
- 53. Upon information and belief, SnRI was aware of the '600 Patent prior to its acts of infringement through, among other things, its acknowledgement of detailed knowledge of the '600 Patent during a September 2, 2015 meeting between SnRI and Cobalt's parent corporation, Cobalt Light Systems Ltd. (UK). Accordingly, SnRI's actions of infringement were made and continue to be made with knowledge of the '604 Patent despite an objectively high likelihood that its actions constituted infringement of a valid patent. Such acts constitute willful infringement, make this case exceptional pursuant to 35 U.S.C. §§ 284 and 285 and entitle Plaintiffs to enhanced damages and reasonable attorneys' fees against SnRI.

PRAYER FOR RELIEF

Wherefore, Plaintiff respectfully requests judgment against Defendant as follows:

- 1. A declaration that Defendant has infringed and is infringing, has induced and is inducing, and has contributed and is contributing to the infringement of the '763 Patent, the '604 Patent and the '600 Patent (the "patents-in-suit").
- 2. That Defendant account for and pay to Plaintiffs all damages caused by its infringement of the patents-in-suit in accordance with 35 U.S.C. § 284;
- 3. Plaintiffs be granted preliminary and permanent injunctive relief pursuant to 35 U.S.C. § 283 enjoining Defendant, its officers, agents, servants, employees and those persons in active concert or participation with them from further acts constituting infringement of the patents-in-suit;

- 4. Plaintiffs be granted pre-judgment and post-judgment interest on the damages caused to them by reason of Defendant's infringement of the patents-in-suit;
- 5. That Defendant account for and pay to Plaintiffs enhanced damages by three times in light of its willful infringement in accordance with 35 U.S.C. § 284;
- 6. The Court declare this an exceptional case and that Plaintiffs be granted their reasonable attorneys' fees in accordance with 35 U.S.C. § 285;
 - 7. Attorneys' fees and costs be awarded to Plaintiffs; and
 - 8. Plaintiffs be granted such other and further relief as the Court may deem just and

proper under the circumstances.

Dated: November 23, 2015

Craig C. Reilly VSB # 20942

111 Oronoco Street

Alexandria, Virginia 22314

TEL: (703) 549-5354 FAX: (703 549-5355

Email: craig.reillv@ccreillvlaw.com

Counsel for Plaintiffs

Of Counsel for Plaintiffs:

Mathew L. Kaufman William R. Thornewell LEASON ELLIS LLP One Barker Avenue, Fifth Floor White Plains, New York 10601

Phone: (914) 288-0022 Fax: (914) 288-0023

Attorneys for Plaintiffs Cobalt Light Systems, Inc. and The Science and Technology Facilities Council